

**Listing of Claims:**

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Claim 1 (Currently amended) A method for reducing line edge roughness of patterned photoresist, comprising:

providing a patterned photoresist, said patterned photoresist having at least a trench; and

filling said trenches, said trenches being totally filled by an additional material being effectively attached to said patterned photoresist,

wherein filling said trenches is with a dip.

Claim 2-7 (Canceled)

Claim 8 (Original) The method of claim 1, said additional material being a fluid material.

Claim 9 (Original) The method of claim 1, said additional material being chosen from the group consisting of solution and suspension.

Claim 10 (Original) The method of claim 1, said additional material being thermosetting polymer.

Claim 11 (Original) The method of claim 1, said additional material being thermoplasticity polymer.

Claim 12 (Previously presented) The method of claim 1, said additional material could be reacted with a hydroxyl group or proton of said patterned photoresist.

Claim 13 (Original) The method of claim 1, said additional material being chosen from the group consisting of PMMA, POLY IMIDE, RELACS, material with a plurality of -NH groups, and material with a plurality of -OH groups.

Claim 14 (Currently amended) The method of claim 1, further comprising ~~A method for reducing line edge roughness of patterned photoresist, comprising:~~

~~providing a patterned photoresist which having at least a trench;~~

~~filling said trenches so let that said trenches are totally filled by an additional material being effectively attached to said patterned photoresist; and~~

~~treating said additional material so let that adhesion between said additional material and said patterned photoresist is enhanced after said additional material is treated.~~

Claim 15-16 (Canceled)

Claim 17 (Currently amended) The method of claim 14 6, wherein available method for treating said additional material is chosen from the group consisting of thermal treatment, ultraviolet light curing, electrons beam curing, treatment of chemical reaction, and chemical reaction between a plurality of functional groups of said patterned

photoresist and a plurality of functional groups of said additional materials.

Claim 18 (Currently amended) The method of claim 1, further comprising  
~~A method for reducing line edge roughness of patterned photoresist,~~  
comprising:

~~providing a patterned photoresist, said patterned photoresist having~~  
~~at least a trench and being located on a substrate;~~

~~filling said trenches, said trenches being totally filled by an~~  
~~additional material being effectively attached to said patterned photoresist;~~  
and

removing part of said additional material, removed part of said  
additional material being located on said patterned photoresist and said  
substrate.

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Claim 19 (Canceled)

Claim 20 (Original) The method of claim 18, wherein available  
method for removing part of said additional material is chosen from the  
group consisting of thermal treatment and spin.

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Claim 21 (New) A method for reducing line edge roughness of  
patterned photoresist, comprising:

providing a patterned photoresist, said patterned photoresist  
having at least a trench; and

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filling said trenches, said trenches being totally filled by an additional material being effectively attached to said patterned photoresist,

wherein filling said trenches is with a spray.

Claim 22 (New) The method of claim 21, said additional material being a fluid material.

Claim 23 (New) The method of claim 21, said additional material being chosen from the group consisting of solution and suspension.

Claim 24 (New) The method of claim 21, said additional material being thermosetting polymer.

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Claim 25 (New) The method of claim 21, said additional material being thermoplasticity polymer.

Claim 26 (New) The method of claim 21, said additional material could be reacted with a hydroxyl group or proton of said patterned photoresist.

Claim 27 (New) The method of claim 21, said additional material being chosen from the group consisting of PMMA, POLY IMIDE, RELACS, material with a plurality of -NH groups, and material with a plurality of -OH groups.

Claim 28 (New) The method of claim 21, further comprising treating said additional material so that adhesion between said additional material and said patterned photoresist is enhanced after said additional material is treated.

Claim 29 (New) The method of claim 28, wherein available method for treating said additional material is chosen from the group consisting of thermal treatment, ultraviolet light curing, electrons beam curing, treatment of chemical reaction, and chemical reaction between a plurality of functional groups of said patterned photoresist and a plurality of functional groups of said additional materials.

Claim 30 (New) The method of claim 21, further comprising removing part of said additional material, removed part of said additional material being located on said patterned photoresist and said substrate.

Claim 31 (New) The method of claim 30, wherein available method for removing part of said additional material is chosen from the group consisting of thermal treatment and spin.

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Claim 32 (New) A method for reducing line edge roughness of patterned photoresist, comprising:

providing a patterned photoresist, said patterned photoresist having at least a trench; and

filling said trenches, said trenches being totally filled by an additional material being effectively attached to said patterned photoresist,

wherein filling said trenches is with spin coating.


Claim 33 (New) The method of claim 32, said additional material being a fluid material.

Claim 34 (New) The method of claim 32, said additional material being chosen from the group consisting of solution and suspension.

Claim 35 (New) The method of claim 32, said additional material being thermosetting polymer.

Claim 36 (New) The method of claim 32, said additional material being thermoplasticity polymer.

Claim 37 (New) The method of claim 32, said additional material could be reacted with a hydroxyl group or proton of said patterned photoresist.

 Claim 38 (New) The method of claim 32, said additional material being chosen from the group consisting of PMMA, POLY IMIDE, RELACS, material with a plurality of -NH groups, and material with a plurality of -OH groups.

Claim 39 (New) The method of claim 32, further comprising treating said additional material so let that adhesion between said additional material and said patterned photoresist is enhanced after said additional material is treated.

Claim 40 (New) The method of claim 39, wherein available method for treating said additional material is chosen from the group consisting of thermal treatment, ultraviolet light curing, electrons beam curing, treatment of chemical reaction, and chemical reaction between a plurality of functional groups of said patterned photoresist and a plurality of functional groups of said additional materials.

Claim 41 (New) The method of claim 32, further comprising removing part of said additional material, removed part of said additional material being located on said patterned photoresist and said substrate.

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Claim 42 (New) The method of claim 41, wherein available method for removing part of said additional material is chosen from the group consisting of thermal treatment and spin.

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